

## FCC §15.247 (i), §2.1091 - RF Exposure

# FCC ID: 2AWRVERK-GTG-I43

#### Applied procedures / limit

According to FCC §15.247(i) and §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

**Limits for Occupational / Controlled Exposure** 

Frequency	Electric Field Strength (E)	Magnetic Field Strength (H)	Power Density (S)	Averaging Time  E  <sup>2</sup> , H  <sup>2</sup> or S	
Range (MHz)	(V/m) ` ´	(A/m) ` ´	(mW/ cm²)	(minutes)	
0.3-3.0	614	1.63	(100)*	6	
3.0-30	1842 / f	4.89 / f	(900 / f)*	6	
30-300	61.4	0.163	1.0	6	
300-1500			F/300	6	
1500-100,000			5	6	

Note: *f* is frequency in MHz

### **Limits for General Population / Uncontrolled Exposure**

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm²)	Averaging Time  E  <sup>2</sup> , H  <sup>2</sup> or S (minutes)	
0.3-1.34	614	1.63	(100)*	30	
1.34-30	824/f	2.19/f	(180/f)*	30	
30-300	27.5	0.073	0.2	30	
300-1500			F/1500	30	
1500-100,000			1.0	30	

Note: f = frequency in MHz

<sup>\* =</sup> Power density limit is applicable at frequencies greater than 100 MHz

<sup>\* =</sup> Plane-wave equivalent power density



### MPE PREDICTION

Predication of MPE limit at a given distance, Equation from OET Bulletin 65, Edition 97-01

$$S = PG/4\pi R^2$$

Where: S = power density

P = power input to antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna, R=0.2m

### **TEST RESULTS**

	Tune up Produce power	Maximu m peak output power (dBm)	Output power to antenn a (mW)	Antenna Gain (numeric)	Power Density (S) (mW/ cm2)	Limit (mW / cm2	Result
ВТ	4±1	5	3.16	1 (0dBi)	0.00063	1	Pass